

UNITED STATES DISTRICT COURT

for the
Southern District of Ohio

In the Matter of the Search of

(Briefly describe the property to be searched
or identify the person by name and address)FORENSIC IMAGE OF SAMSUNG GALAXY S5
CURRENTLY STORED AT DCIS, 3055 KETTERING
BLVD, DAYTON, OHIO 45439

Case No.

FILED
RICHARD W. NAGEL
CLERK OF COURT
2018 MAR 23 AM 11:58
U.S. DISTRICT COURT
SOUTHERN DIST. OHIO
WESTERN DIV. DAYTON
3:18-mj-00261-1
SHARON L. OVINGTON

APPLICATION FOR SEARCH WARRANT

I, a federal law enforcement officer or an attorney for the government, request a search warrant and state under penalty of perjury that I have reason to believe that on the following person or property (identify the person or describe the property to be searched and give its location):

SEE ATTACHMENT A

located in the Southern District of Ohio, there is now concealed (identify the person or describe the property to be seized):

SEE ATTACHMENT B

The basis for the search under Fed. R. Crim. P. 41(c) is (check one or more):

- ☒ evidence of a crime;
- ☒ contraband, fruits of crime, or other items illegally possessed;
- ☒ property designed for use, intended for use, or used in committing a crime;
- ☐ a person to be arrested or a person who is unlawfully restrained.

The search is related to a violation of:

Code Section

Offense Description

SEE ATTACHMENT C

The application is based on these facts:

SEE ATTACHED AFFIDAVIT

- ☒ Continued on the attached sheet.
- ☐ Delayed notice of ____ days (give exact ending date if more than 30 days: ____) is requested under 18 U.S.C. § 3103a, the basis of which is set forth on the attached sheet.

Sworn to before me and signed in my presence.

Date: 3-23-18

City and state: DAYTON, OHIO

Applicant's signature
SA JARED D. CAMPER, DCIS
Printed name and title

Judge's signature
SHARON L. OVINGTON, U.S. MAGISTRATE JUDGE
Printed name and title

ATTACHMENT A

All of the below listed items of electronic media are presently stored at the DCIS Dayton Office located at 3055 Kettering Blvd., Ste. 205, Dayton, OH 45439.

The following items were originally seized on March 15, 2018 from Eric A. Graham's residence located at 2154 Liberty Rd., New Carlisle, OH pursuant to a search warrant issued in Case No. 3:18mj183:

- A forensic image taken from an Apple iPhone 10, SN MQCN2LL/A
- A forensic image taken from an Apple iPad AIR 2, SN DLXPX1FVG5YQ
- A forensic image taken from a Samsung Series 7 Chronos laptop computer, SN HY2U91DC914623Y
- A forensic image taken from a Sandisk Cruzer Micro thumb drive, SN 2048RB
- A forensic image taken from a Sandisk Cruzer Blade thumb drive, SN is unreadable
- A forensic image taken from a Nook thumb drive, no SN
- A forensic image taken from a Cruzer Micro thumb drive, SN Xxx0043
- A forensic image taken from an EMTC thumb drive, no SN.

The following items were originally seized on March 15, 2018 from Tim A. Sparling's residence located at 2799 Silver Maple Lane, Beavercreek, OH pursuant to a search warrant issued in Case No. 3:18mj182:

- A forensic image taken from a Samsung Galaxy S5, SN 352622063981075
- A forensic image taken from a Sandisk thumb drive, SN BM171126162B
- A forensic image taken from a Dell Latitude 3570 laptop computer, SN 73M5VB2
- A forensic image taken from a Dell Latitude E6430s laptop computer, SN is unreadable
- A forensic image taken from a Dell external hard drive, SN NA53BWBK
- A forensic image taken from a Dell Latitude 3570 laptop computer, SN DMSLXB2
- A forensic image taken from Dell Inspiron 3847 desktop computer, SN CCXP942.

ATTACHMENT B
Property to be Seized

Evidence, fruits, and instrumentalities of suspected violations of Title 18, United States Code, to wit: Section 1001 (making false statements); Section 1343 (wire fraud); Section 641 (theft or conversion of U.S. Government property or money); Section 287 (making a false or fraudulent claim against the U.S.); and Sections 371 and 1349 (conspiracy) occurring from the approximate time period of January 1, 2012 through March 15, 2018, including but not limited to:

1. All documents, records, e-mails, text messages and other files ("hard copy or electronic) relating to human resource management for Advratech LLC, including but not limited to employee personnel files, employee lists, employee recall rosters, employee pay statements, employee time sheets, employee payroll reports, employee payroll submittals, state and federal labor distribution reports, state and federal income tax records, employer tax records.
2. All documents, records, emails, text messages and other files ("hard copy or electronic) relating to U.S. Government small business set-aside contracting activities, including SBIR and STTR contracts, subcontracts, invoices, proposals, bids, statements of work, expense reports, and revenue reports.
3. All documents, records, emails, text messages and other files ("hard copy or electronic) relating to the business formation, operation and management of Advratech LLC, including but not limited to correspondence, written correspondence, datafax documents relating to banking activities periodic account statements and other documents, annual reports, pay statements, leases, loan documents, credit card statements, articles of incorporation, business/corporate meeting notes, organization charts, financial statements, checks, wire transfers, deposits, withdrawals, distributions, direct deposit slips, rental agreements, office maintenance contracts, business calling cards, profit and loss statements, and financial statements.
4. All documents, records, emails, text messages and other files ("hard copy or electronic) relating to the Wright State University, the Wright State Research Institute, and/or the Wright State Applied Research Corporation, including but not limited, correspondence, contracts, sub-contracts, payment records, employment documents, business agreements, financial documents, and accounting records.
5. Any electronic media and devices, including but not limited to computers, laptops, and any personal digital assistant, Blackberry phones, iPhones, iPads (or similar devices), smart phones, or cellular phones, which may contain any of the aforementioned documents.

ATTACHMENT C

18 U.S.C. § 1001	Making false statements
18 U.S.C. § 1343	Wire fraud
18 U.S.C. § 641	Theft or conversion of U.S. Government Property or money
18 U.S.C. § 287	Making a false or fraudulent claim against the U.S.
18 U.S.C. §§ 371 & 1349	Conspiracy to commit fraud

AFFIDAVIT

I, Jared D. Camper, being first duly sworn, depose and say:

1. I am a Special Agent with the Defense Criminal Investigative Service (DCIS) which is part of the Department of Defense's (DoD), Office of the Inspector General. I have been so employed for approximately 14 years. I previously served as a Special Agent with the Air Force Office of Special Investigations. I held that position for approximately two years. In my current capacity, I am charged with investigating acts of suspected DoD contract fraud.
2. The facts set forth in this affidavit are based upon my personal knowledge, my review of witness/subject interviews, my review of case related documents and reports, and my discussions with various law enforcement officials who are knowledgeable of the facts and circumstances associated with this investigation. This affidavit has been prepared for the limited purpose of obtaining specific search warrants to examine the stored data contained on various items of electronic media (a complete listing of which appears on Attachment A) all of which was seized by federal agents on March 15, 2018 from: the residence of Eric A. Graham, located at 2154 LIBERTY ROAD, NEW CARLISLE, OHIO 45344 pursuant to a search warrant previously issued by this Court on March 12, 2018 in Case No. 3:18mj183; and the residence of Tim A. Sparling, located at 2799 SILVER MAPLE LANE, BEAVERCREEK, OHIO 45431 pursuant to a search warrant previously issued by this Court on March 12, 2018 in Case No. 3:18mj182. I have opted not to set forth every fact presently known to the investigation. Instead, I have only set forth those facts deemed necessary to establish probable cause for the issuance of the sought after search warrants.
3. The focus of this investigation is a Dayton, Ohio based business known as Advratech, LLC and the company which subsequently purchased it known as Universal Technology Corporation (UTC). For purposes of this affidavit, the two primary persons of interest are: Eric A. Graham, the founder and former majority owner of Advratech, and Tim A. Sparling, Advratech's former Controller.
4. This affidavit is specifically prepared in support of applications for search warrants to forensically exam the specific electronic media listed in Attachment A, all of which was seized on March 15, 2018 pursuant to said search warrants at 2154 LIBERTY ROAD, NEW CARLISLE, OHIO 45344 and 2799 SILVER MAPLE LANE, BEAVERCREEK, OHIO. Each of said items of electronic media have yet to be examined by law enforcement forensic examiners. All of said electronic media have continuously remained stored in the secure care and custody of DCIS officials since first seized. Presently, each listed item remains stored at the DCIS Dayton Office located at 3055 Kettering Blvd., Ste. 205, Dayton, OH 45439. Based on your Affiant's prior training and experience, the stored data contained in each of said items have been preserved in the same state and condition as existed when originally placed into federal law enforcement custody.

5. Based upon the facts contained in this affidavit, your Affiant asserts probable cause does presently exist to believe that relevant evidence, fruits of crime and/or instrumentalities of a criminal activity will be found on each of the above listed electronic media concerning the following suspected violations of Title 18, United States Code, to wit: Section 1001 (making false statements); Section 1343 (wire fraud); Section 641 (theft or conversion of U.S. Government property or money); Section 287 (making a false or fraudulent claim against the U.S.); and Sections 371 and 1349 (conspiracy) committed by individuals who have had past and present association with a Dayton, Ohio based business entity known as Advratech, LLC.

FACTUAL BACKGROUND

6. On or about April 2012, Mr. Graham formed Advratech, LLC. This business was first formed with the active support and encouragement of certain management officials then employed at Wright State University (WSU). The overriding, if not exclusive purpose of forming Advratech was to allow it to bid on, and hopefully secure U.S. Government small business research contracts. Once said contracts were hopefully awarded, Advratech would in-turn sub-contract much, if not all of the required technical and research work under these contracts to WSU and its faculty members. The specific small business "set aside" categories Advratech targeted were: (1) Small Business Innovative Research (SBIR) contracts, and (2) Small Business Technology Transfer (STTR) contracts.
7. Subsequent to Advratech's formation, WSU purchased approximately \$200,000 in minority ownership interest in Advratech.
8. From the outset, both Advratech and WSU fully intended to collaborate on all future SBIR and STTR contracts that Advratech hoped to secure. As such, in October 2012, Advratech and WSU entered into a Master Services Agreement. Pursuant to this agreement, Advratech was prepared to sub-contract with the university whereby WSU professors would be made available to perform required research under future SBIR or STTR contracts. WSU additionally agreed to provide Advratech free research lab facilities and on-campus office space. Mr. Graham signed this Agreement on behalf of Advratech, while Dr. Robert Fyffe, WSU Vice President of Research and Graduate Studies, signed the Agreement on behalf of WSU.

SBIR and STTR Programs

9. The U.S. Government's SBIR and STTR programs were first established in 1982 as part of the Small Business Act, *See* Title 15, United States Code, Section 638. The fundamental purpose of both programs is to: (a) stimulate technological innovation through small businesses; (b) foster and encourage innovation and entrepreneurship by small, disadvantaged businesses; and (c) provide federal funding for the transfer of new technologies from the research lab to the commercial market place. There are three types of SBIR and STTR contracts, to wit: Phase I, II and III. *Phase I* consists of basic research contracts valued at not more than \$150,000, lasting for less than six months.

Phase II consists of full research and development contracts valued at not more than \$1 million, lasting not more than two years. *Phase III* are contracts designed to commercialize research efforts. They have no funding or performance time limits.

10. In order to qualify for a SBIR contract, a prospective small business contractor must meet the following criteria: (1) the company and its affiliated entities must cumulatively have less than 500 employees; (2) the company must employ a Principal Investigator (PI) (or researcher) who is *primarily employed* by the small business, which equates to spending 51% or more of his work time spent working at the small business; and (3) the company must perform at least two thirds (66%) of the research and/or analytical research work on SBIR *Phase I* contracts, and at least one half (50%) of the research and/or analytical work on SBIR *Phase II* contracts. The small business is only permitted to subcontract out a minority amount of the research work, to wit: as long as it performs at least 66% of the research and/or analysis on *Phase I* contracts and at least 50% of the research and/or analysis on *Phase II* contracts.
11. In order to qualify for a STTR contract, a prospective small business contractor must meet the following criteria: (1) the company and its affiliated entities must cumulatively have less than 500 employees; (2) the small business must perform 40% or more of the research and/or analytical work under the contract; and (3) the small business is required to partner with a designated research institute (i.e. a college or university), which must perform at least 30% of the research and/or analytical contract work. The PI may be employed by either the small business or the research institute.
12. Pursuant to the Small Business Administration's (SBA) 2013 SBIR/STTR Program Eligibility Guide, business entities are deemed to be "affiliated" when one entity controls or exercises power over another. The SBA established nine (9) criteria to determine whether affiliation exists between a contractor and another entity. One of these criteria is whether or not the small business contractor uses an ostensible contractor, (which is defined as a subcontractor) to perform primary and otherwise vital requirements of a contract.
13. The WSU professors/researchers that Advratech hoped to have work on its SBIR and STTR contracts were intended to serve in a PI role as defined under the respective programs contracting rules and regulations. Unfortunately, a number of problems arose with this Advratech/WSU arrangement.
14. Under U.S. Government contracting rules and regulations, WSU was never legally eligible to directly apply for, or receive SBIR or STTR contracts. As a result of facts gathered in subject investigation, your Affiant has learned Mr. Graham and certain WSU officials had engaged in discussions that pre-dated Advratech's April 2012 formation. These discussions focused on the intended role of Advratech to serve as a *de facto* conduit for WSU to receive SBIR and STTR research related work and revenue. As such, it is believed that these pre-April 2012 discussions demonstrate a mutual knowledge and intent on the part of both said WSU officials and Mr. Graham to form Advratech for the express purpose of circumventing and defrauding established SBIR and

STTR contract side-aside rules, requirements and policies. As such, the formation of Advratech was designed to defraud the U.S. Government through violation of its small business SBIR/STTR set-aside contracting rules. As such, your Affiant seeks the issuance of search warrants permitting the forensic examination of aforesaid listed electronic media for stored data concerning the time frame between January 1, 2012 through March 15, 2018.

15. Due in part to WSU's minority ownership of Advratech, they were considered "affiliated entities" under U.S. Government contracting rules and regulations. This status created a legal bar for Advratech to apply for, or receive either SBIR or STTR contracts.
16. Between 2014 – 2016, Advratech secured approximately \$3.34 million in small business set-aside contracts from the DoD and the National Aeronautics and Space Administration (NASA). Approximately \$1.3 million of these contracts were SBIR contracts. Under SBIR contracting rules, a PI is required to be identified at the outset of any contract. Advratech's PI (a WSU professor) was in-fact "primarily employed" by WSU. This created yet another legal problem for Advratech, in that under SBIR and STTR contracting rules, PIs have to be primarily employed by the small business contractor.
17. The subject investigation has additionally determined that Advratech failed to meet other PI time and performance requirements established under SBIR and STTR rules.
18. Finally, the subject investigation has also determined that Advratech provided on multiple occasions, materially false statements in SBIR and STTR contract proposals. Many of these false statements were submitted via emails to various U.S. Government contracting officials thereby effecting interstate commerce.

The Advratech/WSU Relationship

19. On January 17, 2018, Mr. Graham, was interviewed relevant to subject investigation. During this interview, he confirmed that Advratech was formed at the request of former WSU officials. Mr. Graham stated: "[W]e started the business Advratech to primarily go after work with Small Business Innovative Research (SBIR) programs...the [WSU] professors would cover over and work 51 percent for the company which met the SBIR rules. And then when the projects were done they would go back...the whole idea was to build the research component at the University. I mean that's really what they wanted us to do."
20. Advratech submitted its first bid for U.S. Government SBIR and STTR contracts in January 2014.
21. On January 17, 2018, Mr. Sparling, was interviewed relevant to subject investigation. During said interview, he explained Advratech was sold to UTC, a Dayton, OH based company in September 2016 at the insistence of WSU officials. As part of the sale, UTC acquired all of Advratech's interests in ongoing SBIR and STTR contracts.

Fraud on Specific Contracts

22. The U.S. Government maintains an internet website designed to permit prospective small business contractors to respond to SBIR and STTR contract solicitations. As part of this process, contractors are required to provide the U.S. Government contracting officers with basic information, to include: a brief summary of how it plans to conduct the SBIR and/or STTR research; and a self-certification that the contractor meets all the SBIR or STTR eligibility requirements. If the contractor otherwise fails to qualify for any of the SBIR or STTR requirements, its application will be rejected by SBA officials.
23. The subject investigation has determined that Mr. Sparling personally entered and submitted eight of the nine Advratech SBIR/STTR solicitation responses that resulted in contract awards. David Burton, Advratech's Program Manager, processed the remaining solicitation response. In each of these nine responses, both Mr. Sparling and Mr. Burton falsely certified that Advratech was not affiliated with any other entity. Had Advratech accurately and truthfully revealed its affiliation with WSU, each of the nine solicitation responses would have been rejected by U.S. Government contracting officials, and the contracts never awarded to Advratech.
24. Three of the said SBIR contracts were valued at approximately \$1.3 million. (See chart below). Under U.S. Government contracting rules, Advratech was required to be the primary employer of the PIs used in these contracts. Advratech did not primarily employ any of the PIs on these contracts. In each of Advratech's responses to these three SIBR solicitations, Mr. Sparling falsely certified that Advratech's PI was primarily employed by Advratech. Had Mr. Sparling accurately revealed in his certification that the PIs were actually primarily employed by WSU, Advratech would never have received these contracts.

<u>Contract</u>	<u>Agency</u>	<u>Phase</u>	<u>Program</u>	<u>Dates</u>	<u>Amount</u>	<u>PI Name</u>
*HQ0147-17-C-7428	DoD	Phase II	SBIR	June 2017 – June 2019	\$999,922	Dr. Michael Cox
FA8650-14-M-5076	DoD	Phase I	SBIR	July 2014 – January 2015; May 2015 – August 2015	\$149,994	Dr. Yan Zhuang
FA8650-15-C-5096	DoD	Phase II	SBIR	August 2015 - August 2017	\$999,989	Dr. Yan Zhuang
*FA8650-17-C-5080	DoD	Sequential Phase II	SBIR	August 2017 – August 2019	\$1,000,000	Dr. Yan Zhuang
\$3,149,905						

25. The starred (*) SBIR contracts were awarded to UTC. Mr. Sparling submitted the

proposal for the SIBR contract with Dr. Yan Zhuang as the PI.

26. Professor Yan Zhuang, PhD, was Advratech's PI on the above listed *Phase I* and *Phase II* contracts. He currently serves as the PI on the above referenced Sequential *Phase II* SBIR contract which was awarded to UTC in August 2017. Each of the three above referenced contracts concern research and development into a new graphene-based sensor that is designed to better detect chemicals. Said contracts were awarded by the Department of the Air Force, and specifically sponsored and paid for by the DoD's Office for Chemical and Biological Defense (CBD). Both of these *Phase I and II* contracts were signed off by Mr. Sparling. The relevant contractual paperwork specifically lists Mr. Graham's home address of 2154 Liberty Road, New Carlisle, Ohio 45344 as Advratech's business premises. The subject investigation has determined that Dr. Zhuang never qualified as a legitimate PI for Advratech because he remained primarily employed by WSU during all relevant time periods.
27. On January 22, 2014, Mr. Sparling responded to CBD's solicitation for a *Phase I* contract which was posted on the U.S. Government website. In this response, Mr. Sparling provided the following materially false statements:
- “3. Number of employees including all affiliates (average for preceding 12 months): **4**”
- “4. Is your firm affiliated as set forth in 13 CFR 121.103? **NO**”
- “22. Is primary employment of the principal investigator (identified below) with your firm as described in paragraph 4.2? **YES**”
- a. Note: Section 4.2 of the solicitation stated, “Each proposer must qualify as a small business at time of award for research or research and development and certify to this in the Cover Sheet section of the proposal. In addition, a minimum of two-thirds of the research and/or analytical work in Phase I must be carried out by the proposing firm. For Phase II, a minimum of one-half (50%) of the research and/or analytical work must be performed by the proposing firm.... For both Phase I and II, the primary employment of the principal investigator must be with the small business firm at the time of the award and during the conduct of the proposed effort. Primary employment means that more than one-half of the principal investigator's time is spent with the small business.”
28. SBIR contract requirements mandate that PIs be primarily employed by the small business at the time of the contract is awarded, and during the contract performance period. This requirement is designed to ensure the legitimacy of the small business contractor. A legitimate and qualified small business is one that already employs a scientist or engineer at the outset of the contracted for research project.

29. In Advratech's cost proposal which was submitted for this SBIR *Phase I* contract, it noted that Dr. Zhuang would work a total of 735 hours on the effort. This block of time equates to the approximate nine-month period during which the original six-month contract performance period of July 2014 through January 2015, and the three-month contract extension period of between May 2015 through August 2015.
30. On January 6, 2015, Mr. Sparling responded to CBD's solicitation for the SBIR *Phase II* contract which was posted on the U.S. Government website. In this response, Mr. Sparling provided the following materially false statements:
 - "2. Are you a small business as described in Section 3.15 of the solicitation, with no more than 500 employees including affiliates? **YES**"
 - "6. Is primary employment of the principal investigator with your firm (identified below) as described in section 4.2 of the solicitation? **YES**"
31. The U.S. Government website specifically stated, "NOTE: IAW Section 4.2 of the solicitation, firms that do not meet all eligibility requirements will not receive award." Advratech's cost proposal for this SBIR *Phase II* contract specifically noted that Dr. Zhuang would work a total of 2,100 hours on the effort (1,050 hours per year), which covered an approximate two-year period during the performance period of August 2015 through August 2017.
32. On June 30, 2015, prior to the formal award of this *Phase II* contract, Mr. Sparling emailed the assigned USAF Contracting Officer advising her that Dr. Zhuang was technically a full-time employee of WSU, however he was not required to work in the summers. This email went on to state that WSU management permitted Dr. Zhuang to work one day of outside employment per week during the academic year. Mr. Sparling further explained in several other email exchanges that since the academic year at WSU consists of 30 weeks (1200 hours), and since Dr. Zhuang was allowed to work one day each week of outside employment (240 hours), Dr. Zhuang technically could work as few as 960 hours, or 24 weeks.
33. Upon receiving said emails, the USAF Contracting Officer became concerned and requested Mr. Sparling to provide assurances that Dr. Zhuang was in-fact intended to work more hours for Advratech than WSU. Mr. Sparling provided USAF Contracting Officials such an assurance when he emailed: "To summarize the PI will work for the small business on the SBIR contract more than 26 weeks during a 12 month period and will work as a faculty member less than 26 weeks during the same 12 month period" and he further wrote in a July 2, 2105 email, "Dr. Zhuang will certainly meet the requirement that more than one-half of his time will be spent working for Advratech".
34. On January 6, 2015, UTC responded to CBD's solicitation for the SBIR Sequential *Phase II* contract on the U.S. Government website. UTC officials provided the following materially false statement:

“Is primary employment of the principal investigator with your firm as described in section 4.2 of the solicitation? **YES**”

Also, UTC’s cost proposal for this SBIR Sequential Phase II contract noted that Dr. Zhuang would work a total of 2,112 hours on the effort (1,056 hours per year), which covered an approximate two-year period during its period of performance of August 2017 through August 2019.

35. Subject investigation has reviewed Dr. Zhuang’s relevant wage reports. They indicate that he earned \$34,700 from Advratech during the last two quarters of 2014 and the first two quarters of 2015. This time period represents the approximate performance period for Advratech’s *Phase I* SBIR contract on which Dr. Zhuang served as its PI. During said time period, Dr. Zhuang also received approximately \$100,971 in gross wages from WSU. Between the fourth quarter of 2015 and the third quarter of 2017 – the approximate period of performance of Advratech’s *Phase II* SBIR contract on which Dr. Zhuang was the PI – Dr. Zhuang reportedly earned \$109,350 from Advratech and UTC (UTC purchased Advratech in the fourth quarter of 2016). During this same time period, Dr. Zhuang also received approximately \$212,412 in gross wages from WSU.
36. On August 10, 2017, December 12, 2017 and January 25, 2018, Dr. Zhuang was interviewed relevant to subject investigation. He advised that he was supposed to spend 51% of his time on Advratech matters. Dr. Zhuang also confirmed that during this same time period he was also employed by WSU. He further confirmed that he always worked significantly more hours at WSU than Advratech. When asked to explain this obvious disparity, Dr. Zhuang indicated that he thought he was satisfying the 51% requirement by simply working 1,050 hours per year. Dr. Zhuang further indicated that Mr. Sparling told him all that was required was that he work 1,050 hours for Advratech. Mr. Sparling never mentioned that under the terms of the SBIR contracts, he was expected to work *more hours for Advratech than WSU*. Dr. Zhuang also admitted to not being employed with Advratech on the dates the *Phase I* and *Phase II* contracts were originally awarded.
37. On January 27, 2018 Mr. Sparling was interviewed relevant to subject investigation at his 2799 Silver Maple Lane, Beavercreek, Ohio 45431 residence. When asked about his knowledge of the SBIR requirements, he explained that Advratech’s PI had to work more time during the year for Advratech than any other employers. Mr. Sparling defined this as a “50% plus one hour” requirement. When advised that Dr. Zhuang claimed to have worked significantly more hours for WSU than Advratech, Mr. Sparling responded that it was not his responsibility to track Zhuang’s WSU hours. When further asked how he was supposed to learn whether or not Dr. Zhuang worked “50% plus one hour,” he responded that he just assumed Dr. Zhuang was working a standard 52-week, 2,080-hour work year. Mr. Sparling admittedly made no efforts to determine how much time Dr. Zhuang actually worked for WSU. Mr. Sparling reiterated that this was ultimately Dr. Zhuang’s responsibility, not his. Mr. Sparling indicated he could not specifically remember ever informing Dr. Zhuang that he had to work more time with Advratech than WSU. Mr. Sparling further explained Dr. Zhuang “had to know this.” Mr. Sparling stated, “They knew the rules as well as we knew the rules...Wright State knew the rules.

Everybody knew the rules. Everybody knows the SBIR rules.” Mr. Sparling further stated, “My requirement was that he work 50% plus 1 hour...if he worked 5,000 hours...I wasn’t aware of it, and I don’t know why he’d do it...he knew the rules as well as I knew the rules...I can’t believe that he didn’t know the 50%+1 requirement...anybody who knows SBIRs or PIs knows what the rules are.” Several times during the interview, Mr. Sparling advised *he would have to review his Advratech-related documents which were located in his home office* in order to provide more specific answers to the investigators questions.

38. On January 17, 2018, Mr. Graham was interviewed relevant to subject investigation at his residence located at 2154 Liberty Road, New Carlisle, Ohio 45344 as part of subject investigation. During this interview, Mr. Graham acknowledged knowing that Advratech’s PI on the SBIR contracts had to be primarily employed with Advratech. As such, he knew that the PI was expected to work more hours for Advratech than anywhere else. Mr. Graham further explained, “And it’s not the 51 percent, it’s the majority of their time. By definition the majority of their time has to be work for the small business...We thought originally it was 51 percent. It was not. We went to the Government and met with them, the Small Business Office at the Air Force and they explained that to us.” During this interview Mr. Graham indicated *he maintained Advratech-related documents in his home office*.
39. On January 3, 2018, the assigned USAF Contracting Officer for each of the aforesaid three Advratech/UTC SBIR contracts with Dr. Zhuang serving as PI, was interviewed relevant to subject investigation. When informed that Dr. Zhuang had in-fact worked more hours for WSU than Advratech, the Contracting Officer responded that if she had been made aware of this fact, none of these contracts would ever have been awarded to Advratech/UTC.
40. The evidence gathered by subject investigation leads your Affiant to conclude that if Advratech had properly and accurately reported the time spent by Dr. Zhuang as a WSU subcontractor, the actual amount of research work he completed by Advratech on the *Phase I* contract would have amounted to approximately 12% of his overall working time (requirement is 66%); on the *Phase II* contract approximately 30% of his research and analytical work (requirement is 50%); and on the Sequential *Phase II* approximately 36% of his time (requirement is 50%). See the following chart.

<u>Proposed Costs</u>	<u>Base + Extension (9 months)</u>	<u>Purported Legitimate Cost</u>	<u>Base + Extension (9 months)</u>
Dr. Zhuang Direct Labor with overhead	\$76,273	Dr. Zhuang Direct Labor with overhead	\$0
Eric Graham Direct Labor with overhead	\$8,621	Eric Graham Direct Labor with overhead	\$8,621
Total Direct Labor	\$84,894	Total Direct Labor	\$8,621

Total Direct Materials	\$4,480	Total Direct Materials	\$4,480
G&A	\$20,637	G&A	\$1,089
Total costs w/o Subcontract	\$110,011	Total costs w/o Subcontract	\$14,190
Subcontract to WSU	\$32,840	Subcontract to WSU with Zhuang labor added in	\$109,113
Total costs	\$142,851	Total costs	\$123,303
Percentage of Advratech's Work	77%	Percentage of Advratech's Work	12%

SBIR Phase II with Dr. Zhuang as PI

<u>Proposed Costs</u>	<u>2 Years</u>	<u>Purported Legitimate Cost</u>	<u>2 Years</u>
Dr. Zhuang Direct Labor with overhead	\$167,633	Dr. Zhuang Direct Labor with overhead	\$0
Eric Graham Direct Labor with overhead	\$97,706	Eric Graham Direct Labor with overhead	\$97,706
Total Direct Labor	\$265,338	Total Direct Labor	\$97,706
Total Direct Materials	\$150,700	Total Direct Materials	\$150,700
G&A	\$64,504	G&A	\$23,752
Total costs w/o Subcontract	\$480,542	Total costs w/o Subcontract	\$272,158
Subcontract to primarily WSU & others	\$468,592	Subcontract to WSU with Zhuang labor added in	\$636,225
Total costs	\$949,134	Total costs	\$908,383
Percentage of Advratech's Work	51%	Percentage of Advratech's Work	30%

SBIR Sequential Phase II with Dr. Zhuang as PI

<u>Proposed Costs</u>	<u>2 Years</u>	<u>Purported Legitimate Cost</u>	<u>2 Years</u>
Dr. Zhuang Direct Labor with overhead	\$140,955	Dr. Zhuang Direct Labor with overhead	\$0
Other Advratech Employees with overhead	\$93,105	Other Advratech Employees with overhead	\$93,105
Total Direct Labor	\$234,060	Total Direct Labor	\$93,105
Total Direct Materials	\$169,908	Total Direct Materials	\$169,908
G&A	\$92,509	G&A	\$60,230
Total costs w/o Subcontract	\$496,477	Total costs w/o Subcontract	\$323,243
Subcontract to primarily WSU & others	\$437,870	Subcontract to WSU with Zhuang labor added in	\$578,825
Total costs	\$934,347	Total costs	\$902,068
Percentage of Advratech's Work	53%	Percentage of Advratech's Work	36%

41. During the June - July 2015 timeframe, the same assigned USAF Contracting Officer sent a series of emails to Mr. Sparling inquiring about Advratech's sub contractual arrangement with WSU and how it related to Dr. Zhuang's purported role as Advratech's PI. Mr. Sparling falsely and deceptively responded: "The subcontract proposed to Wright State is totally separate from Dr. Zhuang's effort."
42. On January 18, 2018 Mr. Burton was interviewed relevant to subject investigation at his 2790 Indian Ripple Road, Suites A-D, Beavercreek, Ohio 45440 office as part of subject investigation. Mr. Burton advised that he first started working for Advratech in May 2015. He indicated that he was assigned as a Program Manager for Advratech on a few SBIR and STTR contracts, including the contracts on which Dr. Zhuang served as PI. Mr. Burton was hired by UTC as a program manager in September 2016 immediately following Advratech's sale. Mr. Burton indicated that he continues to use and possess the same laptop computer he received from and used while employed by Advratech. This same laptop contains all of his former Advratech SBIR and STTR contract related files. *Mr. Burton advised that he continues to use this same computer laptop for his UTC related business purposes. He uses it at his UTC Indian Ripple office.*

43. Mr. Burton advised that Advratech's practice of using WSU professors and researchers as PIs on SBIR contracts pre-dated his arrival at Advratech. As a result, he never thought to challenge the propriety or legality of the practice. When confronted with the black letter contractual definition of the term "primary employment", Mr. Burton opined that Advratech, (and now UTC) obviously was not conforming to the terms of the SBIR contracts. Mr. Burton further indicated concern over the current status of an ongoing SBIR contract in which Dr. Michael Cox of WSU is serving as a PI. Unlike Dr. Zhuang, Dr. Cox is a full-time researcher employed by WSU under a regular 52-week, 2,080 hour employment contract. Mr. Burton explained that WSU specifically reduced Dr. Cox's annual work schedule by 25% to 1,560 hours to allow him to work at UTC. Per Mr. Burton, Dr. Cox has been working 1,050 hours annually on the current SBIR *Phase II* contract.

SIBR Phase II Contract with Dr. Michael Cox as the PI

44. The said SBIR *Phase II* contract on which Dr. Michael Cox serves as PI was awarded to UTC in June 2017. This two year contract is valued at approximately \$999,922. Mr. Sparling submitted the proposal for the contract in July 2016, (a few months before Advratech's sale to UTC). In this proposal Mr. Sparling listed Dr. James Schmitz as the PI. Dr. Cox was designated as WSU's lead on a \$200,000 subcontract from Advratech to UTC. UTC later reversed the PI role of Dr. Schmitz to Cox just prior to the award of this contract.
45. The Missile Defense Agency (MDA) is a DoD agency based out of Huntsville, AL which manages and funds this SBIR *Phase II* contract. This contract involves research and development of sophisticated computer algorithms used to detect enemy ballistic missiles.
46. On July 27, 2016, Mr. Sparling responded to the MDA's solicitation for the *Phase II* contract which was posted on the U.S. Government website. Mr. Sparling provided the following materially false statements as part of his response:

"2. Are you a small business as described in Section 3.15 of the solicitation, with no more than 500 employees including affiliates? **YES**"

"6. Is primary employment of the principal investigator with your firm as described in section 4.2 of the solicitation? **YES**"

NOTE: See Paragraph 27 of this Affidavit for the content of section 4.2.

47. The U.S. Government website specifically stated: "NOTE: IAW Section 4.2 of the solicitation, firms that do not meet all eligibility requirements will not receive award."
48. On February 12, 2018, Dr. Cox was interviewed as part of subject investigation. During this interview he explained he was employed as a full-time research scientist at WSU. He

normally works 40 hours per week at WSU. Under the terms of his WSU employment contract, Dr. Cox is required to work 40 hours per week (on a regular work week without holidays). He does not enjoy the same work hour flexibility as normal WSU professors. He further indicated that has worked as a PI on the SBIR *Phase II* contract awarded by MDA to UTC since September 2017. Dr. Cox explained that in order to be the PI, he was expected to devote 20 hours per week on this job (note: this is 1,040 hours per year when annualized). As a result, WSU management reduced his WSU hours by 25% to 30 hours per week. This allowed him to work the 20 hours per week on the SBIR *Phase II* research. When your Affiant informed Dr. Cox that the SBIR contract requires the PI to work more than half his time for UTC, he stated he was unaware of this. Dr. Cox went on to state that both WSU and UTC management were fully aware that he is working 30 hours per week at WSU, and 20 hours per week at UTC. Dr. Cox went on to indicate he has been only averaging 10-15 hours per week at UTC due to the demands of his position at WSU.

49. On February 16, 2018, the MDA Lead and Technical Monitor (i.e. Program Manager) for said SBIR *Phase II* contract was interviewed relevant to subject investigation. He advised your Affiant that if he had been made aware that either (a) Advratech was affiliated with WSU, or (b) Dr. Cox was in-fact working more hours for WSU than Advratech, this contract would not have been awarded to Advratech.
50. Your Affiant has reviewed the contents of this SBIR *Phase II* contract file. In this file was found a copy of a July 17, 2017 email from UTC's Director of Contracting Services to MDA Contracting Officials. This email stated in part:
 - a. "The employment status of Dr. Jim Schmitz, the originally proposed PI, has recently changed such that he cannot work for the SBC (Universal Technology Corporation [UTC]), 20+ hours per to meet the PI requirement of being employed by the SBC at least 50% of his time...To resolve this issue, UTC proposes to make Dr. Michael Cox the PI for this project...Dr. Cox's position at WSU allows him to go to part-time status and work for UTC at least 20 hours per week, allowing him to meet both PI requirements for SBIRs. The work originally proposed for Dr. Cox as a subcontractor will now performed by him as the PI working for UTC...If Dr. Cox is accepted as the PI, then Dr. Schmitz will then take the lead role on the subcontract to WSU. The tasks originally proposed to be performed by Dr. Jim Schmitz as an employee of UTC will now be performed by him as an employee of WSU."
51. This email clearly confirms UTC's knowledge that Dr. Cox was required to work more hours for UTC than WSU. In reality, Dr. Cox always was a primary employee of WSU while serving as a PI for Advratech/UTC. If Advratech properly and accurately reported Dr. Cox's research work time performed at UTC it would have only totaled approximately 37% of his total working hours.

SBIR Phase II with Dr. Cox as PI

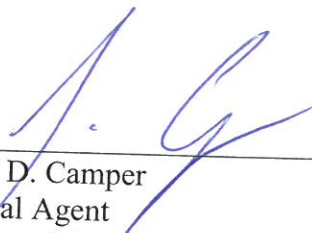
<u>Proposed Costs</u>	<u>2 Years</u>	<u>Purported Legitimate Costs</u>	<u>2 Years</u>
Dr. Cox Direct Labor with overhead	\$240,768	Dr. Cox Direct Labor with overhead	\$0
Other Advratech Employees with overhead	\$143,950	Other UTC Employees with overhead	\$143,950
Total Direct Labor	\$384,718	Total Direct Labor	\$143,950
Total Direct Materials	\$0	Total Direct Materials	\$0
G&A	\$204,281	G&A	\$204,281
Total costs w/o Subcontract	\$588,999	Total costs w/o Subcontract	\$348,231
Subcontract to WSU & Lockheed	\$344,858	Subcontracts with Dr. Cox labor added in	\$585,626
Total costs	\$933,857	Total costs	\$933,857
Percentage of Advratech's Work	63%	Percentage of UTC's Work	37%

52. Based upon your Affiant's prior knowledge, training and experience, coupled with the facts gathered in subject investigation, it is my firm belief and opinion that owners, managers and executives of small businesses engaged in U.S. Government SBIR and STTR contracts, such as Mr. Graham and Mr. Sparling typically maintain business records, correspondence, emails, text messages, other miscellaneous communications, employment and time sheets, contractual records and other related documents at their business offices, personal residences, and on their personally owned electronic media to include cellphones, computer laptops, flash drives, I-Phones, and I-Pads, etc. During the course of subject investigation your Affiant has learned that such records, correspondence, communications, documents and other files related to SBIR and STTR contracts have routinely been, stored in both "hard copy" and electronic formats at Advratech and UTCs' business locations and the residences of Mr. Graham and Mr. Sparling. As such there is probable cause to issue the requested search warrants authorizing the forensic examination of said electronic media for relevant stored data spanning the time frame of January 1, 2012 until March 15, 2018.

NECESSARY PROCEDURES FOR SEARCHING COMPUTERS

53. Based upon the forgoing, your Affiant has reasonable and probable cause to believe that the items listed on Attachment B, will be found and located in the previously seized electronic media which are specifically described and listed in Attachment A, all of which relate to the following suspected violations of Title 18, United States Code, to wit: Section 1001 (making false statements); Section 1343 (wire fraud); Section 641 (theft or conversion of U.S. Government property or money); Section 287 (making a false or fraudulent claim against the U.S.); and Sections 371 and 1349 (conspiracy).
54. I, Jared D. Camper, do swear that I know the contents of this Affidavit subscribed by me, and that to the best of my knowledge and belief, the statements made herein are true, accurate and correct.

Further Affiant Sayeth Naught.



Jared D. Camper
Special Agent
Defense Criminal Investigative Service
Dayton, Ohio

Sworn and Subscribed to before me
this 23rd day of March, 2018.



SHARON L. OVINGTON
UNITED STATES MAGISTRATE JUDGE

